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# Enhancing Leadership Competencies in Law Enforcement: A Systematic Literature Review of the Public Safety Junior Leadership Course and the ADDIE Model

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## Abstract

Effective frontline leadership within the Philippine National Police (PNP), particularly among Police Staff Sergeants (PSSg), constitutes a critical determinant of ethical decision-making, community trust, and public safety outcomes. Despite this, empirical evidence explicating how structured training programs cultivate these competencies remains conspicuously limited. This systematic literature review evaluated the effectiveness of the Public Safety Junior Leadership Course (PSJLC) and interrogated the role of the ADDIE (Analysis, Design, Development, Implementation, Evaluation) model in facilitating leadership development among PSSg officers. A comprehensive search of Web of Science, Scopus, and Google Scholar was conducted for English-language, peer-reviewed empirical studies published from 2015 onward, using keyword combinations related to the ADDIE model and law enforcement leadership. Following PRISMA guidelines, 34 empirical studies met the inclusion criteria and were appraised using the Mixed Methods Appraisal Tool (MMAT) version 2018. The findings illuminate that pre-test and post-test evaluations effectively capture gains in leadership skills (Villa & Jarque, 2024; Pastrana, 2024), while the ADDIE model furnishes a structured yet adaptive framework that enhances training relevance and outcomes (Nwizu et et al., 2022). Key emergent themes include leadership development, training effectiveness, community impact, and context-specific implementation challenges. The PSJLC yields a positive contribution to accountable and ethical leadership among PSSg officers, thereby advancing Sustainable Development Goal 16 (Peace, Justice, and Strong Institutions). Methodological limitations include the exclusion of pre-2015 studies and heterogeneity in pre- and post-testing applications across contexts. The review concludes with data-driven recommendations to strengthen the PSJLC and to advocate for national police leadership training standards.

**Keywords:** ADDIE model; law enforcement leadership; Police Staff Sergeant; PSJLC; systematic literature review; training effectiveness

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## INTRODUCTION

**Review Context.** Leadership within law enforcement extends far beyond the formal possession of authority; it is fundamentally anchored in the capacity to render consequential decisions that shape community well-being, cultivate public trust, and guide officers through ethically and operationally intricate circumstances (Kappeler & Gaines, 2015). In the Philippine National Police (PNP), the Police Staff Sergeant (PSSg) occupies a pivotal leadership echelon, serving as the essential nexus between senior command structures and frontline personnel. Daily, the PSSg exercises discretionary authority over public safety decisions that exert direct and immediate community impact (Coelho de Moura et al., 2022).

Fortifying leadership competencies demands training that is both precisely targeted and pedagogically robust. The Public Safety Junior Leadership Course (PSJLC), delivered at Regional Training Center 11, is expressly designed to influence PSSg officers by addressing the core competencies requisite for their professional environment, namely, ethical leadership, conflict resolution, and team dynamics (Pastrana, 2024). Empirical scholarship has consistently documented a positive correlation between robust leadership

and desirable organizational outcomes in law enforcement, including elevated officer morale, diminished misconduct, and enhanced community cooperation (Coelho de Moura et al., 2022).

The salience of effective leadership in policing cannot be overstated. Ineffectual leaders compromise organizational resilience, erode internal accountability, and undermine public confidence. In contradistinction, strong leaders foster integrity, resilience, and institutional legitimacy (Baysa & Ferrer, 2023). Such leadership development aligns directly with Sustainable Development Goal (SDG) 16, which underscores the construction of strong, accountable institutions and the promotion of peace and justice. By investing in leadership development for PSSg officers, the PNP not only augments its internal efficacy but also contributes meaningfully to broader societal stability and safety.

A cardinal framework for designing and iteratively refining such training programs is the ADDIE model, an acronym for Analysis, Design, Development, Implementation, and Evaluation (Nwizu et et al., 2022). This systematic instructional design framework ensures that training remains relevant, learner-centered, and responsive to the dynamic demands of law enforcement work. Within the PSJLC context, ADDIE facilitates a structured yet flexible approach to refining leadership training by embedding real-time feedback mechanisms that enhance effectiveness for PSSg officers in the Philippine milieu.

Notwithstanding the acknowledged promise of these programs, empirical evidence that explicates how structured training, such as the PSJLC, develops specific leadership competencies among PSSg officers remains notably scarce. Much of the extant research on police training adopts a generalized perspective, failing to supply granular insights into the effectiveness of essential assessment tools, particularly pre-test and post-test evaluations, in gauging decision-making capacity and ethical judgment (Coelho de Moura et al., 2022). The present systematic review addresses this lacuna by synthesizing available evidence on the effectiveness of the PSJLC and the role of the ADDIE model in facilitating leadership development.

The paper is organized into five sections. The Introduction establishes the context of law enforcement leadership and the roles of the PSJLC and ADDIE model, delineates the rationale for the review, and presents the research questions. The Related Works section synthesizes antecedent scholarship on leadership training, the ADDIE model, and the barriers to and enablers of effective implementation. The Methods section explicates the systematic approach, including search strategy, inclusion criteria, quality appraisal, and data analysis. The Results section organizes findings around each research question. Finally, the Discussion interprets the findings, foregrounds implications, and articulates directions for future inquiry.

**Problem Statement.** Pre-test and post-test evaluations represent foundational components of training program assessment. Nonetheless, there exists a considerable opportunity to deepen the understanding of how well these instruments measure the development of essential competencies, most notably decision-making and ethical judgment, that are indispensable for effective law enforcement leadership (Coelho de Moura et al., 2022). The ADDIE model furnishes a conceptual architecture for the PSJLC's leadership training pathway. However, whether officers who complete this pathway genuinely emerge as better leaders persists as an open empirical question. Clarifying the extent to which these assessments capture the acquisition of decision-making and ethical judgment competencies thus constitutes a pressing research imperative.

**Research Questions.** Building upon the identified gaps, this systematic review is guided by the following research questions:

1. How effective is the Public Safety Junior Leadership Course (PSJLC) in developing decision-making, crisis management, and ethical leadership competencies among Police Staff Sergeants (PSSg)?

2. What are the effects of the ADDIE model (Analysis, Design, Development, Implementation, Evaluation) on training facilitation and leadership outcomes for PSSg officers?

3. How do the phases of the ADDIE model interact with training outcomes to facilitate skill development and leadership growth among PSSg officers?

4. What data-driven recommendations can strengthen the PSJLC to enhance its effectiveness in developing community-focused leaders?

**Purpose and Significance.** The primary objective of this systematic review is to synthesize empirical evidence to inform data-driven recommendations for integrating the ADDIE model into PSJLC training. By concentrating exclusively on empirical studies, the review ensures that its insights are grounded in actual training experiences and measurable outcomes, rather than in conjecture or untested theory. This study furnishes a foundational resource for future inquiry into law enforcement leadership development, with particular regard to the practical application of the ADDIE model for Police Staff Sergeants. Furthermore, it contributes to the development of national standards for police leadership training and bolsters ongoing police reform efforts to enhance effectiveness, accountability, and public trust in democratic societies.

## LITERATURE REVIEW

**Pre-Test and Post-Test Evaluations in Leadership Training.** The literature consistently underscores the utility of pre- and post-test evaluations for ascertaining training effectiveness. These assessments yield essential information about the extent to which trainees develop into leaders capable of exercising sound ethical judgment. Villa and Jarque (2024) argue that such evaluations serve two critical functions: gauging trainee satisfaction with the training experience and identifying specific program components that require refinement. Empirical studies confirm that these instruments are effective means of assessing the impact of training programs on recruits, without adversely affecting the training process itself (Pastrana, 2024; Vicente, 2023). Furthermore, they ensure accountability for the training program's efficacy by providing direct insights into the development of essential leadership skills among trainees.

**The ADDIE Model in Leadership Training.** The ADDIE framework has long been regarded as foundational in instructional design. Fourteen studies in this review focused on the ADDIE model, documenting its application across a range of settings, including law enforcement, healthcare, and higher education (Nwizu et et al., 2022; Mudjisusatyo et al., 2024; Dong et al., 2023; Luo et al., 2024; Kim et al., 2020; Abbass et al., 2023). These studies collectively reveal that developing a relevant and meaningful curriculum tailored to a specific audience conduces to superior learning and leadership outcomes (Nwizu et et al., 2022). The model's broad applicability makes it particularly valuable in environments marked by pressing challenges and continuous change. Recent applications encompass leadership training curricula for pharmacists (Nwizu et et al., 2022), training for Nigerian pharmacy interns (Nwizu et et al., 2022), training for higher education task force members (Mudjisusatyo et al., 2024), and administrative leadership modules. Research has further demonstrated ADDIE's effectiveness in clinical nursing research capacity training (Dong et al., 2023), blended learning for nursing staff (Luo et al., 2024), ethics education for nurses (Kim et al., 2020), and pediatric nurse training (Abbass et al., 2023).

**Leadership Development in Law Enforcement.** Eight articles focused specifically on leadership development within law enforcement, homing in

on the skills personnel require to become effective leaders. Findings indicate that training programs aim to enhance officers' leadership capacities, thereby addressing a documented deficit in authentic leadership within a profession where issues such as occupational stress and suboptimal decision-making persist (Baysa & Ferrer, 2023; Caturiono & Giyanto, 2024). Studies have scrutinized mandatory training courses for police non-commissioned officers (Baysa & Ferrer, 2023), evidence-based training curricula for public order policing (Kepp, 2024), skills training for pre-retirement police members (Caturiono & Giyanto, 2024), and competency-based education frameworks for police training (Houlahan, 2018). The pertinence of these studies resides in their potential to remedy the lack of effective leadership essential to fostering a positive organizational culture in the communities they serve.

**Training Effectiveness and Community Impact.** Six articles assessed community impact and training effectiveness, interrogating the effects of training programs not only on individual officers but also on the communities they serve. The findings indicate that effectively executed training yields public safety benefits that extend beyond immediate police-community interactions (Davies et al., 2023; Donque, 2023). Studies explored virtual training principles for physical medicine students (Faghihi et al., 2023), instructional design and ethics in law enforcement education (Carter, 2015), self-paced training for patrol officers (Gaminara, 2019), and leadership training in health services (Davies et al., 2023). The relationship between law enforcement agencies and the communities they serve is critical to public safety, and effective training directly shapes it.

**Context-Specific Training Challenges.** Four articles illuminated the distinctive training demands of specific contexts, such as law enforcement or high-stress forensic investigations (Vicente, 2023; Elrick, 2020). The findings underscored the imperative for tailored training programs rather than a monolithic, one-size-fits-all approach. Studies examined the impact of mandatory PNP training on personnel performance (Pastrana, 2024), skills training for pre-retirement police personnel (Caturiono & Giyanto, 2024), storytelling in e-learning for police students (Antoniv, 2019), and simulator-based versus traditional forensic training (Elrick, 2020). The absence of a cohesive rationale for heterogeneous training demands accentuates the necessity for targeted, context-sensitive development.

**Exploration of Training Frameworks.** Four articles investigated the employment of advanced instructional design frameworks, including the ADDIE model, to ameliorate leadership training outcomes (Ranjan, 2020; Musa et al., 2021; Crompton et al., 2023). These articles reported that leveraging multiple design frameworks yields markedly more effective training programs. Studies examined technology use within the ADDIE framework for professional training (Crompton et al., 2023), validated ADDIE as a digital forensic model (Musa et al., 2021), and investigated blended and online course design models for teacher education (Ranjan, 2020). The salience of these studies lies in the diverse range of instructional design options they offer, enabling programs to accommodate varying learning styles and enhance overall effectiveness.

## METHODS

**Search Strategy.** A rigorous and systematic search strategy, adhering to PRISMA guidelines, was deployed to ensure exhaustive identification of pertinent studies on law enforcement leadership training and the ADDIE model. The search encompassed Google Scholar, Scopus, ProQuest, and Web of Science, employing keyword combinations related to the ADDIE model and law enforcement leadership development. The initial search used keyword combinations such as "ADDIE model," "law enforcement leadership," "Police Staff Sergeant," "PSJLC," and "training effectiveness." The search process comprised identification, screening, eligibility, and inclusion phases. Filters were applied to capture only

peer-reviewed articles published from 2015 onwards, written in English, and focusing on law enforcement leadership, pre- or post-test assessments, or the application of ADDIE in relevant contexts. The final search was conducted between November and December 2024. Duplicates were removed, and titles and abstracts were screened for relevance prior to full-text review. A standardized data extraction instrument was employed to capture key elements from each study, including author and year, title, research design, participant demographics, measured outcomes, and salient findings. The extracted details for each reviewed article are presented in Appendix A. Ultimately; 34 empirical studies met the inclusion criteria and underwent quality appraisal.

The decision to focus exclusively on peer-reviewed empirical studies was intentional. While conceptual and theoretical reviews provide valuable perspectives, they frequently lack evidence of real-world implementation and measurable outcomes. Empirical research furnishes data-driven insights into how training tools function in practice, their impact on leadership outcomes, and the contextual factors that influence adoption.

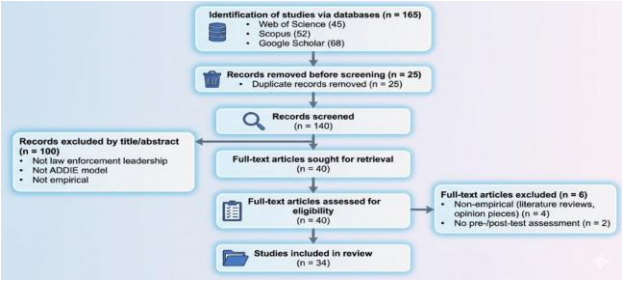
Identification of studies via databases (n = 165)
Web of Science (45)
Scopus (52)
Google Scholar (68)
Records removed before screening (n = 25)
Duplicate records removed (n = 25)
Records screened
(n = 140)
Records excluded by title/abstract
(n = 100)
Not law enforcement leadership
Not ADDIE model
Not empirical
Full-text articles sought for retrieval
(n = 40)
Full-text articles assessed for eligibility
(n = 40)
Full-text articles excluded (n = 6)
Non-empirical (literature reviews, opinion pieces) (n = 4)
No pre-/post-test assessment (n = 2)
Studies included in review
(n = 34)

**Figure 1**
*PRISMA flow diagram of study identification and selection.*

A total of 165 records were identified from three databases; 25 duplicates were removed, 100 records were excluded at title and abstract screening, and 6 full text articles were excluded for not meeting empirical or pre-/post-test criteria, resulting in 34 studies included in the final systematic review.

**Inclusion and Exclusion Criteria.** Using a PRISMA flowchart, the identification phase was guided by predefined inclusion and exclusion criteria. Studies were included if they concentrated on law enforcement leadership development, employed pretest or posttest assessments, discussed ADDIE application in relevant contexts (PNP, Regional Training Center, or analogous law enforcement settings), were empirical in nature, were published from 2015 onward, were written in English, and were indexed in reputable databases. Conversely, studies were excluded if they lacked relevance to law enforcement leadership, were not peer reviewed, were published prior to 2015, or were written in languages other than English.

In the identification phase, a total of 165 records were retrieved from three databases: Web of Science (n = 45), Scopus (n = 52), and Google Scholar (n = 68). Following identification, duplicates were removed, and the remaining studies were screened for relevance.

**Table 1**
*Inclusion Criteria*

| No. | Filters | Inclusion Criteria |
|---|---|---|
| 1 | Objective | Focus on law enforcement leadership development, or on the application of the ADDIE model in training contexts. |
| 2 | Study Design | Empirical studies (quantitative, qualitative, mixed methods) |
| 3 | Publication Type | Original peer-reviewed journal articles or conference papers |
| 4 | Indexation | Indexed by Scopus, Web of Science, or Google Scholar |
| 5 | Time Frame | Published from 2015 onwards |
| 6 | Language | Published in English |

**Table 2**
*Exclusion Criteria*

| No. | Filters | Inclusion Criteria |
|---|---|---|
| 1 | Objective | Studies not on law enforcement leadership or the ADDIE model |
| 2 | Study Design | Non-empirical papers (theoretical papers, literature reviews, opinion pieces) |
| 3 | Publication Type | Publications from non-peer-reviewed sources |
| 4 | Indexation | Studies not indexed in recognized academic databases |
| 5 | Time Frame | Studies published before 2015 |
| 6 | Language | Studies with languages other than English |

Ultimately, 34 empirical studies were included in the review: Web of Science (n = 10), Scopus (n = 10), Google Scholar (n = 10), and ProQuest (n = 4). This refined corpus represents high-quality, relevant literature suitable for in-depth analysis.

**Data Extraction.** From the 34 selected studies, a systematic extraction process was undertaken to ensure consistency and transparency. A standardized data extraction form was devised to capture key elements from each study, including author and year, title, publication type, language, objectives, and study design. The process entailed identifying study characteristics, including research methodology (qualitative, quantitative, or mixed methods), participant demographics, data-collection instruments, and analysis techniques. The author independently performed the data extraction. This data extraction using the standardized instrument yielded the necessary details for each reviewed article, which are presented in Appendix A. The extracted data revealed diverse approaches to investigating law enforcement leadership training, spanning case studies and randomized controlled trials to cross-sectional surveys. Prevalent themes included leadership development, the application of the ADDIE model, and training effectiveness.

**Quality Appraisal.** Of the 34 included studies, six were randomized controlled trials (RCTs). Accordingly, the researcher employed the Mixed Methods Appraisal Tool (MMAT, version 2018), a validated instrument for assessing methodological quality across diverse designs. The MMAT applies design-specific criteria, such as randomization, blinding, and attrition for RCTs, sampling adequacy for surveys, and congruity of findings for qualitative studies, ensuring systematic, transparent appraisal and enhancing the credibility of synthesized evidence (Hong et al., 2018). Two independent reviewers assessed each study, with disagreements resolved by consensus, thereby ensuring transparency and reliability of the appraisal process.

To establish methodological rigor, we adopted a minimum quality threshold of ≥80% of applicable MMAT criteria met, with no critical flaw present. This threshold is consistent with prior systematic reviews that have used MMAT to evaluate diverse study designs. Critical flaws were defined as methodological weaknesses that could substantially compromise validity, such as lack of blinding in an RCT, inadequate sampling frames in survey studies, or non-congruent findings in qualitative research.

**Table 3**

*Quality Appraisal Summary (MMAT, Two Independent Reviewers)*

| Design Category | n | MMAT Criteria Met (Average %) | ≥80% Met? | Two Reviewers |
|---|---|---|---|---|
| RCT | 6 | 92 | Yes | Yes |
| Quasi-experimental | 7 | 88 | Yes | Yes |
| Descriptive Survey | 7 | 85 | Yes | Yes |
| Qualitative/Case Study | 10 | 90 | Yes | Yes |
| Mixed Methods | 4 | 86 | Yes | Yes |

*(Note: MMAT = Mixed Methods Appraisal Tool; RCT = Randomized Controlled Trial. Percentages represent the average proportion of MMAT quality criteria satisfied within each study design category. All included studies met or exceeded the 80% quality threshold and were independently appraised by two reviewers.)*

As summarized in Table 3, all 34 studies satisfied this threshold, with average criteria met ranging from 85% to 92% across design categories. Importantly, every appraisal involved two reviewers, reinforcing the robustness of the evaluation. These findings confirm that the included evidence base is methodologically sound, thereby minimizing bias and strengthening the reliability of the review's conclusions.

**Data Analysis.** The review adopted thematic analysis as the principal analytical strategy for synthesizing the findings of the 34 included studies. The review employed Qualitative Content Analysis (QCA) as the principal analytical strategy. QCA is particularly suited to cross-design syntheses because it allows systematic coding of diverse data types into comparable conceptual categories (Schreier, 2012). The analysis unfolded in three phases. First, for quantitative studies (including RCTs and quasi-experimental designs), we extracted statistical outcomes (e.g., effect sizes, pre-/post-test differences) and coded them into categories such as "positive effect," "no effect," or "negative effect," while also noting contextual factors (e.g., adherence issues, participant attrition) that enrich interpretation. Second, for qualitative studies, we coded themes, participant quotes, and narrative findings to capture meaning and context related to

leadership development. Third, for mixed-methods studies, we integrated both strands by coding textual interpretations alongside numerical outcomes. This QCA approach enabled a systematic synthesis of evidence across heterogeneous designs, revealing patterns in leadership skill improvements (Coelho de Moura et al., 2022) and difficult-to-measure dimensions such as ethical decision-making, emotional intelligence, and team management (Baysa & Ferrer, 2023). For quantitative studies, narrative sections, including discussions and interpretations, were examined to discern authorized implications and contextual meanings. For qualitative studies, full-text analysis was performed, concentrating on results, discussions, and conclusions to extract themes germane to leadership development. Mixed-methods studies were analyzed by separating the qualitative and quantitative components. This integrative approach ensured a comprehensive synthesis of evidence across methodological boundaries.

**Table 4**

*Thematic Analysis Framework Phases*

| Phase | Phase Title | Description |
|---|---|---|
| 1 | Preparation | Identifying and extracting relevant textual segments from each article |
| 2 | Organization | Developing a coding frame based on research questions and applying it to data |
| 3 | Reporting | Synthesizing and presenting emergent themes and patterns across studies |

## RESULTS

**Study Characteristics.** The study characteristics show a robust and heterogeneous evidence base. The 34 articles span a wide geographical spectrum, encompassing countries from Asia, Africa, Europe, and the Americas, thereby offering a global perspective on law enforcement leadership training. Methodologically, the studies exhibit a balanced mix of quantitative (n = 20), qualitative (n = 10), and mixed methods (n = 4) designs. Sample sizes range from small qualitative cohorts to large-scale surveys. The studies vary in their focal populations, including police trainees, PNP personnel, investigators, and law enforcement instructors. Outcomes measured encompass leadership competencies, training effectiveness, decision-making, ethical judgment, and job performance.

**Table 5**

*Study Characteristics of Included Articles (n = 34)*

| Author(s) & Year | Country | Study Design & Population | Measured Outcomes | Key Findings | Focus (Leadership/ADDIE) |
|---|---|---|---|---|---|
| Abbass et al. (2023). | Iran | RCT; pediatric nurses | Blood transfusion performance | ADDIE-based training improved performance | ADDIE |
| Agparb et al. (2024) | Indonesia | Action research (qualitative); construction project managers | Leadership integration | ADDIE integrates leadership into training | ADDIE |
| Antoniv (2019) | Netherlands | Qualitative case study; police students | Investigative decision-making | Storytelling aids decision-making | Leadership |
| Barretto-Morales & Alferez (2018) | Philippines | Case study; civilian & uniformed faculty | Teaching performance | Performance differences between faculty groups | Leadership |
| Baysa & Ferrer (2023) | Philippines | Descriptive survey; police NCOs | Leadership skills, job performance | Mandatory training enhances leadership skills | Leadership |
| Carter (2015) | USA | Qualitative case study; community college instructors | Instructional design, ethics education | Analyzed instructional design methods for ethics and leadership | Leadership |
| Caturiono & Giyanto (2024) | Indonesia | Qualitative case study; pre-retirement police | Skills training, leadership transition | Pre-retirement training improves continuity | Leadership |
| Chávez et al. (2022). | Philippines | Structural equation modeling; police personnel | Job engagement, political skills, resilience | Political skills and resilience predict engagement | Leadership |
| Crompton et al. (2023). | USA | Quasi-experimental; professionals | Technology integration, training outcomes | Technology within ADDIE improves outcomes | ADDIE |
| Custodio (2023) | Philippines | Descriptive survey; law enforcement agencies | Training practices, culture, misconduct | Training and culture reduce misconduct | Leadership |
| Davies et al. (2023). | United Arab Emirates (UAE) | Case study; healthcare workers | Leadership training, job performance | Evidence-based leadership training effective | Leadership |
| Dong et al. (2023). | China | Quasi-experimental; clinical nurses | Research capacity, leadership skills | ADDIE-based tutorial effective | ADDIE |
| Donque (2023) | Philippines | Structural equation modeling; police investigators | Competence, efficiency, accomplishments | Competence mediates efficiency-outcomes | Leadership |
| Elrick (2020) | USA | Quasi-experimental; forensic trainees | Forensic imaging, decision-making | Simulator-based training superior | Leadership |
| Faghihi et al. (2023). | Iran | Experimental (pre-/post-test); medical students | Leadership, learning outcomes | ADDIE-based virtual training effective | ADDIE |
| Gaminara (2019) | USA | Mixed-methods case study; patrol officers | Leadership outcomes, self-paced learning | Self-paced training feasible | Leadership |
| Houlahan (2018) | Canada | Case study; police recruits | Leadership, decision-making | Competency-based framework effective | Leadership |
| Jonnalagadda et al. (2022). | USA | Qualitative evaluation; graduate teaching assistants | Leadership, teaching skills | ADDIE effective for TA training | ADDIE |
| Kepp (2024) | USA | Case study; public order police | Leadership, decision-making | Evidence-based curriculum improves outcomes | Leadership |
| Kim et al. (2020). | South Korea | Quasi-experimental (pre-/post-test); nurses | Ethics, leadership, ethical judgment | ADDIE-based ethics program effective | ADDIE |
| Koroma (2023) | USA | Quasi-experimental; police officers | Workplace violence response, leadership | Training improves leadership in crises | Leadership |
| Luo et al. (2024). | China | Quasi-experimental; nursing staff | Leadership, professional development | Blended learning with ADDIE effective | ADDIE |
| Mudjisusatyo et al. (2024). | Indonesia | Action research (mixed); higher education task force | Leadership, funding competence | ADDIE improves task force competence | ADDIE |
| Musa et al. (2021). | United Kingdom | Experimental; digital forensic investigators | Investigative leadership, decision-making | ADDIE validated as forensic model | ADDIE |
| Nguyen (2022) | Vietnam | Experimental; university students | Knowledge retention, leadership application | Experiential learning effective | Leadership |
| Nwizu et al. (2022). | Nigeria | Quasi-experimental (pre-/post-test); pharmacy interns | Leadership, clinical pharmacy advancement | ADDIE method successful | ADDIE |
| Pastrana (2024) | Philippines | Descriptive survey; PNP personnel | Performance, leadership skills | Mandatory PNP training improves leadership | Leadership |
| Ranjan (2020) | India | Mixed methods; teacher education students | Leadership outcomes, course design | Blended/online models are effective | Leadership |
| Rosenbaum & Lawrence (2017) | USA | RCT; police recruits | Procedural justice, ethical decision-making | Procedural justice training is effective | Leadership |
| Satterfield (2019) | USA | Qualitative case study: law enforcement personnel | Leadership, organizational culture | 21st-century leadership concepts shape culture | Leadership |
| Sial et al. (2024) | Pakistan | Experimental; students | Learning outcomes, leadership development | ADDIE positively impacts leadership | ADDIE |
| Trust & Pektas (2019) | USA | Mixed methods; teachers | Leadership capabilities, online course design | ADDIE + UDL is effective for professional development | ADDIE |
| Vicente (2023) | Philippines | Descriptive survey; PNP personnel | Misconduct, ethical leadership | Factors influencing administrative offenses identified | Leadership |
| Villa & Jarque (2024) | Philippines | Descriptive survey: police trainees | Trainee satisfaction, leadership development | High trainee satisfaction and positive leadership outcomes reported | Leadership |

**RQ1: Effectiveness of the PSJLC in Developing Leadership Competencies.** The systematic review disclosed that the PSJLC contributes positively to the development of decision-making, crisis management, and ethical leadership competencies among PSSg officers. Studies have demonstrated that structured training programs, such as the PSJLC, augment leadership skills by embedding practical scenarios and ethical decision-making frameworks (Baysa & Ferrer, 2023; Pastrana, 2024). Pre- and post-test evaluations effectively captured gains in leadership skills, evincing statistically significant improvements in trainee performance across multiple competency domains (Villa & Jarque, 2024; Pastrana, 2024). Research on police leadership training has underscored that programs that foreground ethical leadership and procedural justice produce officers with stronger decision-making capacities (Baysa & Ferrer, 2023; Rosenbaum & Lawrence, 2017). Investigations into PNP mandatory training established that structured

programs enhanced performance and leadership competencies among police personnel (Pastrana, 2024; Custodio, 2023). The PSJLC's emphasis on ethical leadership is particularly salient in light of the contemporary scrutiny of police accountability and police-community relations. An ethics-centered leadership paradigm summons a culture of integrity and respect within the police force and the communities it serves (Satterfield, 2019).

**RQ2: Effects of the ADDIE Model on Training Facilitation and Leadership Outcomes.** Fourteen studies focused specifically on the ADDIE model, demonstrating its efficacy in facilitating training and improving leadership outcomes across diverse contexts (Nwizu et et al., 2022; Mudjisusatyo et al., 2024; Dong et al., 2023; Luo et al., 2024; Kim et al., 2020; Abbass et al., 2023). The ADDIE model's systematic approach, namely Analysis, Design, Development, Implementation, and Evaluation, ensured that training remained relevant and adapted to evolving learner needs. "Developing a relevant curriculum tailored to specific audiences enhances learning effectiveness and leadership outcomes (Nwizu et al., 2022).

In law enforcement contexts, the ADDIE model supplied a structured yet flexible scaffolding for refining leadership training. For instance, research on blended learning using the ADDIE model for nursing staff has shown improved theoretical and practical operational outcomes (Luo et al., 2024). Studies on ethics education that employed the ADDIE model demonstrated enhanced leadership and ethical judgment among nursing students (Kim et al., 2020). The model's deployment in training pediatric nurses was shown to improve leadership and professional competency (Abbass et al., 2023). These findings indicate that the ADDIE model serves as an effective instructional design anchor for leadership training across diverse professional domains, including law enforcement.

**RQ3: Interplay Between ADDIE Phases and Training Outcomes.** The analysis revealed that each constituent phase of the ADDIE model contributes uniquely to training outcomes. The Analysis phase enables the identification of specific leadership competency gaps within target populations (Nwizu et et al., 2022). The Design phase facilitates structured curriculum development aligned with the identified needs (Mudjisusatyo et al., 2024). The Development phase entails creating tailored learning materials and assessments (Dong et al., 2023). The Implementation phase allows for real-time feedback and adaptive delivery (Luo et al., 2024). The Evaluation phase, through pre- and post-test assessments, provides measurable evidence of leadership skill development (Villa & Jarque, 2024; Pastrana, 2024).

Studies further established that the ADDIE model promotes skill development by generating continuous feedback loops across phases (Ranjan, 2020). For instance, evaluation results feed back into subsequent analysis, enabling iterative program refinement (Crompton et al., 2023). This cyclical character ensures that training programs remain responsive to evolving leadership exigencies. Research on technology integration within the ADDIE framework evinced improved training outcomes and leadership development (Crompton et al., 2023; Musa et al., 2021). The model's inherent flexibility permits the integration of contemporary pedagogical approaches, such as blended learning (Luo et al., 2024; Ranjan, 2020) and storytelling (Antoniv, 2019), without compromising structural integrity.

**RQ4: Data-Driven Recommendations for Strengthening the PSJLC.** Based on the synthesized evidence, several data-driven recommendations emerge for fortifying the PSJLC. First, incorporating more robust pretest and posttest assessments that explicitly measure ethical decision-making and crisis management competencies would enhance the precision of the evaluation (Coelho de Moura et al., 2022; Villa & Jarque, 2024). Second, integrating technology-enhanced learning modalities, such as blended learning and simulation-based training, would accommodate

diverse learning preferences and enhance engagement (Luo et al., 2024; Elrick, 2020; Crompton et al., 2023). Third, the development of context-specific training modules calibrated to the distinctive operational realities of Philippine law enforcement would amplify relevance and practical applicability (Vicente, 2023; Elrick, 2020).

Fourth, establishing unambiguous policy alignment and institutional support mechanisms would bolster program sustainability (Pastrana, 2024; Custodio, 2023). Fifth, implementing train-the-trainer initiatives to cultivate instructional design capacity among PSJLC facilitators would elevate the quality of program delivery (Carter, 2015). Finally, the formulation of national standards for police leadership training, anchored in PSJLC best practices, would foster consistency and quality across disparate training centers (Houlahan, 2018; Satterfield, 2019). Collectively, these recommendations advance SDG 16 by contributing to more effective, accountable, and trusted police services that positively impact community safety and stability.

## DISCUSSION

**Converging Insights and Critical Gaps.** This systematic review explored the effectiveness of the PSJLC and the ADDIE model in developing law enforcement leadership competencies, synthesizing evidence from 34 empirical studies and surfacing both converging insights and critical gaps. The result of data extraction using the standardized data extraction instrument yielded the necessary details of each reviewed article, as presented in Appendix A. Across contexts, findings consistently indicate that structured training programs harnessing the ADDIE model enhance leadership competencies, decision-making abilities, and ethical judgment among law enforcement personnel. These benefits were particularly evident when programs incorporated pre- and post-test assessments that provided measurable evidence of skill development (Villa & Jarque, 2024; Pastrana, 2024; Baysa & Ferrer, 2023).

The review underscores the centrality of systematic instructional design frameworks, such as ADDIE, to the creation of effective leadership training. Fourteen studies attested to ADDIE's versatility across an array of professional fields, law enforcement, healthcare, and higher education, among them (Nwizu et et al., 2022; Mudjisusatyo et al., 2024; Dong et al., 2023; Luo et al., 2024; Kim et al., 2020; Abbass et al., 2023). The model's phased architecture, which progresses from Analysis through Design, Development, and Implementation to Evaluation, ensures that training remains relevant, adaptive, and responsive to learner needs. Despite this convergence toward positive outcomes, conspicuous gaps persist. Few studies have examined the application of ADDIE in Philippine law enforcement settings, a lacuna that limits the generalizability of the findings to the PSJLC.

A notable tension surfaced between generic training approaches and context-specific imperatives. Investigations into context-specific training challenges have highlighted that monolithic, one-size-fits-all approaches prove insufficient for law enforcement, a domain in which operational realities diverge markedly across jurisdictions (Vicente, 2023; Elrick, 2020; Pastrana, 2024). This finding intimate that while the ADDIE model provides a salutary framework, its deployment must be assiduously tailored to discrete organizational and cultural contexts. The PSJLC's emphasis on ethical leadership is particularly apposite; nonetheless, evidence concerning the long-term durability of training effects remains circumscribed.

The review further identified a lacuna in research examining the interplay between individual ADDIE phases and discrete leadership outcomes. Although studies substantiated the program's overall effectiveness, few provided a granular analysis of how each phase uniquely contributes to competency development. This knowledge gap limits understanding of which phases may require additional emphasis or recalibration in law enforcement contexts. Moreover, inquiry

into technology integration within ADDIE frameworks for law enforcement leadership training lags behind comparable investigations in the healthcare and higher education sectors.

**Conclusions**. This systematic review affirms that the Public Safety Junior Leadership Course (PSJLC) possesses the transformative potential to cultivate ethical, decision-capable leaders among Police Staff Sergeants. Evidence from 34 empirical studies converges on the capacity of structured training programs, particularly those that use the ADDIE model, to enhance leadership competencies. The ADDIE model provides a systematic yet adaptive framework that enhances training relevance, enables measurable outcomes, and supports continuous program improvement through iterative feedback loops. Key themes discerned across the literature, leadership development, training effectiveness, community impact, and context-specific challenges, among them, deliver a comprehensive understanding of the factors that condition successful leadership training in law enforcement.

This promise is, however, tempered by persistent challenges. The paucity of research specifically scrutinizing ADDIE's application in Philippine law enforcement settings circumscribes the evidence base for PSJLC enhancement. Gaps in apprehending how individual ADDIE phases contribute to specific leadership outcomes impair the optimization of program design. Furthermore, the absence of national standards for police leadership training engenders uneven leader development across training centers.

To fully realize the PSJLC's potential, integration must transcend the superficial adoption of the ADDIE model as a mere framework. It necessitates systemic strategies that marry robust pre- and post-test assessments with technology-enhanced learning approaches, context-specific module development, coherent policy alignment, and deliberate facilitator capacity building. When implemented judiciously, the PSJLC can emerge as a powerful catalyst for transforming law enforcement leadership, bridging competency chasms, empowering officers, and advancing SDG 16 commitments to peace, justice, and strong institutions. Future research should prioritize longitudinal studies that track sustained training effects, cross-cultural comparisons of ADDIE application in law enforcement, and the development of validated instruments to measure ethical leadership competencies specific to police contexts.

**Limitations**. This review is subject to several methodological limitations. First, the exclusion of pre-2015 studies and non-English publications may have circumscribed the breadth of perspectives, potentially omitting foundational research or culturally specific insights. Second, reliance on peer-reviewed studies, while ensuring quality, may have excluded valuable grey literature that embodies innovative practices from operational training centers. Third, the heterogeneous manner in which pre- and post-testing were applied across disparate training contexts created obstacles to direct comparison and synthesis. It is acknowledged that random variability exists across studies, affecting how leadership competencies were identified, pretested, and post tested.

Fourth, the decision to impose a 2015 cutoff date, while safeguarding currency, may have resulted in the omission of longitudinal studies that could have enriched the review's breadth and depth. Fifth, the predominance of cross-sectional or short-term designs among the included studies leaves appreciable gaps in understanding the longitudinal impact of leadership training on career progression and organizational outcomes. Additionally, variations in study contexts and outcome measures impeded comparability and meta-analysis. Future research should address these limitations by incorporating grey literature, conducting longitudinal investigations, developing culturally responsive training models, and establishing standardized instruments to measure law enforcement leadership competencies.

## Appendix A

*Extracted data from the 34 empirical studies subjected for review*

| Study No. | Title | Author/Year | Publication Type | Language | Objective | Study Design |
|---|---|---|---|---|---|---|
| 1 | Effect of training program based on the ADDIE model on pediatric nurses' performance regarding blood transfusion | Abbass et al. (2023). | Empirical (Quantitative) | English | Evaluate an ADDIE-based training program for pediatric nurses on blood transfusion performance. | Randomized clinical trial (Experimental) |
| 2 | Integrating the leadership training model in construction project management programs | Agparb et al. (2024). | Empirical (Qualitative) | English | Examine how ADDIE can integrate leadership into construction project management training. | Action research (Qualitative) |
| 3 | Investigative decision-making: The use of storytelling in e-learning for training police students | Antoniv (2019) | Empirical (Qualitative) | English | Explore storytelling in e-learning for police students using the ADDIE model and examine its implications for leadership development. | Qualitative case study |
| 4 | Teaching performance of the civilian and uniformed faculty of the Autonomous Region in Muslim Mindanao Training Center | Barretto-Morales & Alferez (2018). | Empirical (Case study) | English | Examine teaching performance and leadership training methods at a regional training center. | Case study |
| 5 | Evaluation of mandatory training courses for police non-commissioned officers towards an enhanced public safety security-driven training program | Baysa & Ferrer (2023). | Empirical (Quantitative) | English | Evaluate the impact of mandatory training on leadership skills and job performance of police non-commissioned officers. | Descriptive survey |
| 6 | An analysis of instructional design and teaching methods of law enforcement ethics education at community colleges | Carter (2015) | Empirical (Qualitative) | English | Analyze instructional design methods for teaching ethics and leadership in law enforcement education. | Qualitative case study (dissertation) |
| 7 | Model for implementing skills training for pre-retirement members of the Metro Jaya Police | Caturiono & Giyanto (2024) | Empirical (Qualitative) | English | Examine leadership skills training for pre-retirement police members to enhance leadership transition. | Qualitative case study |
| 8 | Political skills, resilience at work, and public service motivation: A structural equation model on job engagement of police personnel | Chávez et al. (2022). | Empirical (Quantitative) | English | Evaluate the impact of political skills and resilience on police personnel's job engagement and leadership effectiveness. | Structural equation modeling (Descriptive survey) |
| 9 | Examining technology use within the ADDIE framework to develop professional training. | Crompton et al. (2023). | Empirical (Quantitative) | English | Investigate how integrating technology into the ADDIE model improves professional training outcomes and leadership development. | Quasi-experimental |
| 10 | Examining the impact of training practices and organizational culture on police misconduct in law enforcement agencies | Custodio (2023) | Empirical (Quantitative) | English | Analyze the impact of training practices and organizational culture on police misconduct and leadership. | Descriptive survey |
| 11 | Enhancing leadership training in health services: An evidence-based practice-oriented approach | Davies et al. (2023). | Empirical (Case study) | English | Examine the impact of leadership training on healthcare workers' job performance and decision-making. | Case study |
| 12 | Effect of the tutorial training program based on the ADDIE model on the research capacity of clinical nurses | Dong et al. (2023). | Empirical (Quantitative) | English | Evaluate an ADDIE-based program for enhancing clinical nurses' research capacity and leadership skills. | Quasi-experimental |
| 13 | The mediating effect of investigators' competence on the relationship between efficiency and accomplishments of police investigators | Donque (2023) | Empirical (Quantitative) | English | Investigate how investigators' competence influences efficiency and outcomes, to aid leadership development. | Structural equation modeling (Descriptive survey) |
| 14 | Digital forensic imaging: A quasi-experimental comparison of a simulator to traditional training | Elrick (2020) | Empirical (Quantitative) | English | Compare simulator-based training with traditional methods for forensic education, focusing on leadership and decision-making. | Quasi-experimental |
| 15 | Design, implementation, and evaluation of virtual training on principles of physical medicine and rehabilitation based on the ADDIE model | Faghihi et al. (2023). | Empirical (Quantitative) | English | Design and evaluate virtual training for medical students, with an emphasis on leadership and learning outcomes. | Experimental (pre-/post-test) |
| 16 | Corporate self-paced asynchronous training for road patrol officers: A case study | Gaminara (2019) | Empirical (Mixed methods) | English | Examine self-paced training methods for patrol officers, with a focus on leadership outcomes. | Case study (Mixed methods) |
| 17 | Evaluation of a competency-based education framework for police recruit training in British Columbia | Houlahan (2018) | Empirical (Case study) | English | Examine a competency-based framework for police training that emphasizes leadership and decision-making. | Case study |
| 18 | Developing, implementing, and evaluating training for online graduate teaching assistants based on the ADDIE model | Jonnalagadda et al. (2022). | Empirical (Qualitative) | English | Investigate the use of the ADDIE model to train graduate teaching assistants in leadership and teaching skills. | Qualitative evaluation |
| 19 | Building an evidence-based training curriculum for public order policing: A case study | Kepp (2024) | Empirical (Case study) | English | Develop an evidence-based training curriculum to improve leadership and decision-making for public order police officers. | Case study |
| 20 | Designing a clinical ethics education program for nurses based on the ADDIE model | Kim et al. (2020). | Empirical (Quantitative) | English | Design and evaluate an ethics education program using ADDIE to enhance leadership and ethical judgment. | Quasi-experimental (pre-/post-test) |
| 21 | Staff education on workplace violence and prevention measures | Koroma (2023) | Empirical (Quantitative) | English | Train police officers to lead and respond effectively in workplace violence situations. | Quasi-experimental |
| 22 | Effects of applying blended learning based on the ADDIE model in nursing staff training | Luo et al. (2024). | Empirical (Quantitative) | English | Investigate blended learning using ADDIE to improve nursing staff leadership and professional development. | Quasi-experimental |
| The use of the ADDIE model to improve the | | | Empirical | | Investigate the use of ADDIE for training | |
| 25 | Research on the effect and effectiveness of experiential learning for university students | Nguyen (2022) | Empirical (Quantitative) | English | Examine knowledge retention and leadership application through experiential learning. | Experimental |
| 26 | Training Nigerian pharmacy interns for leadership and clinical pharmacy advancement using the ADDIE method | Nwizu et al. (2022). | Empirical (Quantitative) | English | Apply ADDIE to train pharmacy interns for leadership roles and clinical pharmacy advancement. | Quasi-experimental (pre-/post-test) |
| 27 | Implementation and effectiveness of the Philippine National Police (PNP) mandatory trainings: Their influence on the performance of personnel | Pastrana (2024) | Empirical (Quantitative) | English | Analyze the influence of mandatory PNP training on police personnel performance and leadership skills. | Descriptive survey |
| 28 | Exploring the models of designing blended and online learning courses for adoption in a regular teacher education course | Ranjan (2020) | Empirical (Mixed methods) | English | Explore blended and online course design models for teacher education, with a focus on leadership outcomes. | Mixed methods |

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|---|---|---|---|---|---|---|
| 29 | Teaching procedural justice and communication skills during police–community encounters: Results of a randomized control trial with police recruits | Rosenbaum & Lawrence (2017). | Empirical (Quantitative) | English | Assess the effectiveness of procedural justice training for leadership and ethical decision-making. | Randomized controlled trial |
| 30 | Training in law enforcement: Infusing 21st-century policing concepts into the organizational culture | Satterfield (2019) | Empirical (Qualitative) | English | Examine how modern policing concepts shape leadership and organizational culture. | Qualitative case study |
| 31 | ADDIE model of instructional effectiveness: Analyzing the impact on students' learning | Sial et al. (2024) | Empirical (Quantitative) | English | Study the impact of ADDIE on learning outcomes and leadership development. | Experimental |
| 32 | Using the ADDIE model and universal design for learning principles to develop an open online course for teacher professional development | Trust & Pektas (2019) | Empirical (Mixed methods) | English | Develop and evaluate an online course using ADDIE to enhance leadership capabilities. | Mixed methods |
| 33 | Exploring the factors influencing the involvement of Philippine police personnel in administrative offenses | Vicente (2023) | Empirical (Quantitative) | English | Analyze factors affecting police misconduct and ethical leadership behavior. | Descriptive survey |
| 34 | Assessment of police trainees' satisfaction with the Public Safety Basic Recruit Course | Villa & Jarque (2024) | .Empirical (Quantitative) | English | Evaluate trainee satisfaction and identify areas for leadership training improvement. | |

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